AMENDMENTS OT THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

1-45. (Cancelled)

46. (New) A first network device for managing a cluster of network devices, said first network device comprising:

an input interface adapted to receive a network device management request from a management station via a first HTTP connection, the request including a Universal Resource Identifier (URI) and management data for a network device; and

a request redirector adapted to determine a second network device in the cluster indicated by the URI and to redirect the request via a forwarding HTTP connection to the second network device.

47. (New) The first network device in accordance with claim 46, wherein said request redirector comprises:

a read module for reading the management data in the request from the first HTTP connection; and

a write module writing the management data to the forwarding HTTP connection.

48. (New) The first network device in accordance with claim 46, wherein said request redirector further comprises:

an end determiner module for determining whether the entire management data has been received from the first HTTP connection.

49. (New) The first network device in accordance with claim 48, wherein said end determiner module compares the management data stream to a predetermined data pattern indicating termination of the data stream.

50. (New) The first network device in accordance with claim 49, wherein the request is a GET request.

51. (New) The first network device in accordance with claim 48, wherein said end determiner module parses a header of the request and extracting a field containing a length of the request.

52. (New) The first network device in accordance with claim 51, wherein the request is a POST request.

53. (New) The first network device in accordance with claim 46, wherein the URI comprises Universal Resource Location (URL) and Universal Resource Name (URM).

54. (New) The first network device in accordance with claim 46, wherein the URI comprise a string specific to the corresponding network device.

55. (New) The first network device in accordance with claim 46, further comprising:

a processing module adapted to locally process the request if the URI does not indicate any one of the network devices in the cluster.

56. (New) The first network device in accordance with claim 46, further comprising:

a response redirector for redirecting a response from a network device in the cluster to the management station.

57. (New) The first network device in accordance with claim 56, wherein said response redirector includes:

a read module for reading response data in the response from the forwarding HTTP connection; and

a write module for writing the response data to the first HTTP connection.

58. (New) The first network device in accordance with claim 46, further comprising:

an HTTP server adapted to establish a first Transmission Control Protocol (TCP) connection from the management station, and to establish a forwarding TCP connection to an HTTP server on a network device in the cluster so as to provide the management station with Web access to the network device.

59. (New) An apparatus for managing a cluster of network devices, said apparatus comprising:

means for receiving a network device management request from a management station via a first HTTP connection, the request including a Universal Resource Identifier (URI) and management data for a network device;

means for determining a network device in the cluster indicated by the URI; and

means for redirecting the request via a forwarding HTTP connection to the indicated network device.

60. (New) The apparatus of claim 59, wherein said apparatus is a LAN switch.

61. (New) The apparatus according to claim 60, wherein the network devices are LAN switches.

62. (New) The apparatus according to claim 59, wherein said apparatus has a non-private IP address and the network device have private IP addresses.

63. (New) The apparatus in accordance with claim 59, wherein said means for redirecting comprises:

means for reading the management data in the request from the first HTTP connection; and

means for writing the management data to the forwarding HTTP connection.

64. (New) The apparatus in accordance with claim 59, wherein said means for redirecting further comprises:

means for determining whether the entire management data has been received from the first HTTP connection.

65. (New) The apparatus in accordance with claim 64, wherein said means for determining whether the entire management data has been received compares:

means for comparing the management data stream to a predetermined data pattern indicating termination of the data stream.

66. (New) The apparatus in accordance with claim 65, wherein the request is a GET request.

67. (New) The apparatus in accordance with claim 64, wherein said means for determining whether the entire management data has been received comprises:

means for parsing a header of the request and extracting a field containing a length of the request.

68. (New) The apparatus in accordance with claim 67, wherein the request is a POST request.

69. (New) The apparatus in accordance with claim 59, wherein the URI comprises Universal Resource Location (URL) and Universal Resource Name (URM).

70. (New) The apparatus in accordance with claim 59, wherein the URI comprises a string specific to the corresponding network device.

71. (New) The apparatus in accordance with claim 59, further comprising:

means for locally processing the request if the URI does not indicate any one of the network devices in the cluster.

72. (New) The apparatus in accordance with claim 59, further comprising:

means for redirecting a response from a network device in the cluster to the management station.

73. (New) The apparatus in accordance with claim 72, wherein said means for redirecting a response from the network device comprises:

means for reading response data in the response from the forwarding HTTP connection; and

means for writing the response data to the first HTTP connection.

74. (New) The apparatus in accordance with claim 73, further comprising:

means for establishing a first Transmission Control Protocol (TCP) connection from the management station;

means for establishing a forwarding TCP connection to an HTTP server on a network device in the cluster to provide the management station with Web access to the network device.

75. (New) A system for managing a cluster of network devices, said system comprising:

means for sending a network device management request via a first HTTP connection, the request including a Universal Resource Identifier (URI) indicating a network device and management data for the indicated network device;

means for receiving the request from the first HTTP connection;

means for determining if the URI indicates one of the network devices in the cluster;

means for redirecting the request via a forwarding HTTP connection to the network device in the cluster indicated by the URI; and

at least one network device in the cluster to be managed, capable of receiving the redirected request from the forwarding HTTP connection.

76. (New) The system in accordance with claim 75, wherein said means for redirecting comprises:

means for reading the management data in the request from the first HTTP connection; and

means for writing the management data to the forwarding HTTP connection.

77. (New) The system in accordance with claim 75, wherein said means for redirecting further comprises:

means for determining whether the entire management data has been received from the first HTTP connection.

78. (New) The system in accordance with claim 77, wherein said means for determining whether the entire management data has been received from the first HTTP connection comprises:

means for comparing the management data stream to a predetermined data pattern indicating termination of the data stream.

79. (New) The system in accordance with claim 78, wherein the request is a GET request.

80. (New) The system in accordance with claim 77, wherein said means for determining whether the entire management data has been received from the first HTTP connection comprises:

means for parsing a header of the request and extracting a field containing a length of the request.

81. (New) The system in accordance with claim 80, wherein the request is a POST request.

82. (New) The system in accordance with claim 75, wherein the URI includes Universal Resource Location (URL) and Universal Resource Name (URM).

83. (New) The system in accordance with claim 75, wherein the URI includes a string specific to the corresponding expansion network device.

84. (New) The system in accordance with claim 75, further comprising:

means for locally processing the request if the URI does not indicate any one of the expansion network devices.

85. (New) The system in accordance with claim 75, further comprising:

means for redirecting a response from the expansion network device to said means for sending a network device management request.

86. (New) The system in accordance with claim 85, wherein said means for redirecting a response from the expansion network device comprises:

means for reading response data in the response from the forwarding HTTP connection; and

means for writing the response data to the first HTTP connection.

87. (New) The system in accordance with claim 75 wherein said expansion device includes:

means for authenticating the redirected request.

88. (New) The system in accordance with claim 87, wherein said means for authenticating comprises:

means for comparing an IP address of a sender of the request with a Cluster Management Protocol (CMP) address of said means for redirecting the request via the forwarding HTTP connection.

89. (New) The system in accordance with claim 88, wherein said means for authenticating comprises:

means for checking if the CMP address of said means for redirecting the request via the forwarding HTTP connection is associated with a Media Access Control (MAC) address of said means for redirecting the request via the

forwarding HTTP connection using an IP Address Resolution Protocol (ARP) table.

90. (New) The system in accordance with claim 75, wherein said means for redirecting the request via the forwarding HTTP connection comprises:

means for establishing a first Transmission Control Protocol (TCP) connection from the management station; and

means for establishing a forwarding TCP connection to an HTTP server on said expansion network device to provide said means for sending a network device management request with Web access to the expansion network device.